

WHAT IS CLAIMED IS:

1. A method for improving speech recognition performance, the method comprising:
a) determining initial information and a mapping target;
b) mapping the initial information to at least one model;
c) identifying a model having a best fit to the initial information; and
d) associating the model having a best fit with the mapping target as a default model.

2. The method of claim 1 wherein a mapping target further comprises one of a user and a communication channel.

3. The method of claim 1, wherein the initial information relates to personal characteristics of the user.

4. The method of claim 4, wherein the personal characteristics include at least one from the group comprised of: gender, native language, age, ethnicity, and home region.

5. The method of claim 1, wherein the initial information relates to communication channel characteristics.

6. The method of claim 6, wherein the communication channel characteristics include at least one from the group comprised of: type of connection, model of phone, network identifiers, network characteristics and background noise level.

7. The method of claim 1, wherein the method further comprises associating at least one alternative model with the mapping target from the mapped models.

8. A method for dynamically selecting a speech model, the method comprising:
a) receiving a call from a user;
b) determining characteristics of a communications channel through which the call is received;
c) selecting a speech model based upon the characteristics of the channel; and
d) configuring a speech recognizer to use the selected model.

9. The method of claim 10, wherein the method further comprises selecting a default speech model.

10. The method of claim 11, wherein the method further comprises overriding selection of the default speech model based upon analysis of fit of the default and alternate speech models based upon at least one of the group comprised of: communication channel characteristics, personal characteristics of the user, and a

combination of communication channel characteristics and personal characteristics.

11. The method of claim 10, wherein receiving a call from a user further comprises determining information identifying the user.

5 12. The method of claim 13, wherein the method further comprises overriding selection of the default speech model based upon analysis of fit of the default and alternate speech models based upon at least one of the group comprised of: communication channel characteristics, personal characteristics of the user, and a combination of communication channel characteristics and personal characteristic.

10 13. The method of claim 10, wherein selecting a speech model further comprises selecting a speech model that will become associated with the channel as the default model.

14. The method of claim 10, wherein selecting a speech model further comprises selecting a speech model that is not currently a default model for the channel.

15 15. An article including instructions that, when executed, result in:

- a) reception of a call from a user;
- b) determination of characteristics of a communications channel through which the call is received;
- c) selection of a speech model based upon the communication channel characteristics; and
- d) configuring a speech recognizer to use the selected model

20 16. The article of claim 17, wherein the article includes further instructions that, when executed, result in determination of information identifying the user.

17. The article of claim 17, wherein the article includes further instructions that, when executed, result in selection of the default speech model.

25 18. The article of claim 19, wherein the article includes further instructions that, when executed, override selection of the default model based upon analysis of the fit of the default and alternate speech models based upon at least one of the group comprised of: communication channel characteristics, personal characteristics of the user, and a combination of communication channel characteristics and personal characteristics.

30 19. A method for dynamically selecting a speech model, the method comprising:

- a) receiving a call from a user;

- b) identifying the user;
- c) accessing user information;
- d) selecting a speech model based upon characteristics of the user; and
- e) configuring a speech recognizer to use the selected model.

5 20. The method of claim 21, wherein the method further comprises determining characteristics of a communications channel through which the call is received.

A' 21. The method of claim 21, wherein the method further comprises selecting a default speech model.

10 22. The method of claim 23, wherein the method further comprises overriding selection of a default speech model based upon analysis of the fit of the default and any alternate speech models based upon at least one of the group comprised of: communication channel characteristics, personal characteristics of the user, and a combination of communication channel characteristics and personal characteristics.

15 23. The method of claim 21, wherein selecting a speech model further comprises selecting a speech model that will become associated with the user as a default model.

24. The method of claim 21, wherein selecting a speech model further comprises selecting a speech model that is not currently a default model for the user.

20 25. An article including instructions that, when executed, result in:

- a) reception of a call from a user;
- b) identification of the user;
- c) access of user information;
- d) selection of a speech model based upon characteristics of the user; and
- e) configuring a speech recognizer to use the selected model.

25 26. The article of claim 28, wherein the article further includes instructions that, when executed, result in determination of characteristics of a communications channel through which the call is received.

30 27. The article of claim 28, wherein the article further includes instructions that, when executed, result in selection of a default speech model.

28. The article of claim 29, wherein the article further includes instructions that, when executed, result in overriding selection of the default speech model based upon analysis of the fit of the default and alternate speech models based upon at least

one of the group comprised of: communication channel characteristics, personal characteristics of the user, and a combination of communication channel characteristics and personal characteristics.

29. A speech recognition system, comprising:

- A 5 a) At least two speech models;
- 10 b) A control module operable to:
 - i) determine context information about a call;
 - ii) select one of the speech models based on the context information; and
 - iii) configure a speech recognizer to use the selected model.
- 15 c) A recognition engine operable to:
 - i) receive an input speech stream;
 - ii) receive information about which speech model to use from the control module;
 - iii) convert an input speech stream to an output text stream using the speech model.

20 30. The system of claim 31, wherein the information about the call includes at least one piece of information from the group comprised of: personal characteristics, communication channel characteristics, and a combination of personal and communication channel characteristics.